ART. VI.—On the Nest and Eggs of the Coach-whip Bird (Psophodes Crepitans, Gould), and of the White-fronted Epthianura (Epthianura Albifrons, Gould), with some general remarks on the Nidification of Australian Birds. By A. Dobree, Esq.

[Read before the Royal Society, August 27, 1861.]

As neither Mr. Gould's work on Australian ornithology, nor such others as I have been able to consult, contain any particulars of the nidification of the two above-mentioned species, I am led to the conclusion that, although probably casually discovered, no description has as yet been published, and beg therefore to communicate the following notes, from personal observation.

1st. Psophodes Crepitans (Gould). Coach-whip Bird.

This bird is well known to most Australian colonists, though, probably, far more frequently by the peculiar note whence it derives its current name, than by its appearance, as it generally keeps itself concealed amidst thickets and brushes. To naturalists this species is extremely interesting, as its singular characteristics have long rendered it a matter of doubt what precise place to assign to it in the ranks of Australian birds. The details of its nidification may tend to the further

elucidation of this point.

It will not be out of place first to quote a few of Mr. Gould's very accurate remarks on the habits of this bird. He says, "It is only to be found in dense brushes, and is a shy and recluse species; for although its full notes—ending sharply like the crack of a whip—indicate its presence, it rarely exposes itself to view, but generally keeps in the midst of the densest foliage and among the thickest climbing plants, frequenting alike those that have intertwined themselves with the branches of the tallest shrubs, and those that form almost impenetrable masses near the ground, and through which it threads its way with the utmost case. It is extremely animated and sprightly in all its actions. Of its nidification, I regret to say I know nothing, although I paid great attention to the subject myself, and offered rewards for its nest and eggs, and for any information respecting them."

The present nest and eggs were obtained by me near the banks of the Yarra Yarra, near Heidelberg, on one of those points of land or "bends" of the river still left in their original state, and where the underwood and tangle are extremely dense. Being on a visit in the neighbourhood on the opposite side of the river late in the previous summer, my attention was attracted by the remarkable note of this bird, but as the breeding season was then past, I merely noted its haunt. Finding, however, on reference to Gould's work, that its nidification was unknown, and relying on a general fact I had often observed, namely, that the same pair (apparently) of birds will, if undisturbed, return for several years to the same locality for breeding, I revisited the spot about the commencement of the next summer, and, after a short search, was rewarded by the discovery of the nest, on which the female bird was sitting so closely as almost to allow herself to be captured; thus removing all doubt as to the identity of the nest and eggs. The nest was in the most tangled part of the thicket, and placed in the forked branches of a shrub, about four feet from the ground—it is cupshaped, about five inches outside diameter, the exterior of dry slender twigs, and the interior lined with thin fibres and a few pieces of horsehair, the latter evidently owing to the accidental vicinity of some farms; the whole structure is neither very solidly nor elaborately built. It contained two eggs-length, exactly one inch: extreme width, three quarters of an inch. In shape they are not much pointed at the thinner end, and the greatest girth is at about the middle. Their ground-colour is pale greenish blue, with streaks and dots of various sizes scattered pretty equally over the whole surface; these markings are of a brownish black colour, and of two kinds, the one being very distinct and sharp, the other somewhat less numerous, more grevish, and much fainter, having the appearance of being under the shell. From the fact of the bird sitting so closely, I conclude that no more than two eggs are generally laid, though the present ones had not yet been perceptibly incubated.

I regret to say I have kept no precise memorandum as to the date of finding the nest, but believe it to have been about the end of October.

2nd. Epthianura Albifrons. White-fronted Epthianura.

This bird, which at the first cursory glance recals the familiar English black and white Water-Wagtail, both by its

general appearance and motions, is by no means uncommon round Melbourne.

Mr. Gould writes as follows in his notice of this species:—
"I first met with it in a state of nature on the small islands in Bass' Straits, where it had evidently been breeding, as I observed several old nests in the barilla and other stunted shrubs—its natural province is the ground, to which it habitually resorts, and decidedly evinces a preference for spots of a sterile and barren character; it trips along with amazing swiftness, with a motion that can neither be described as a hop or a run, but something between the two, accompanied by a bobbing action of the tail. Of its nidification I regret

to say nothing is at present known."

It may be met with in the dry portion of the swamps extending between the Saltwater and Yarra rivers. I discovered its nest about four feet from the ground, in a stunted bush, on the edge of the dense "teatree" scrub which covers part of that locality. The structure is cupshaped, somewhat deep, and about four inches outside diameter; dried fibres, fine twigs, and stalks form the exterior, and the lining is composed of horsehair and fine grasses. It contained three fresh-laid eggs; length, 11-16ths inch; extreme width, 17-32nds inch; shape, not much pointed; ground-colour, white, with fine redbrown markings, consisting of points, streaks, and roundish dots, the larger markings being most abundant at the thicker end, where they form a sort of wreath, while some of the smaller ones are scattered over the other parts of the surface. The markings are, in nearly every case, surrounded by a faint ashy margin of their own colour, imitating the appearance of their having been painted on the white ground before the latter had properly dried, thus causing them partially to run into the white surface. This seems to be a decided characteristic in these eggs. The nest was discovered about October.

Mr. Dobrée then proceeded to make some general remarks on the most interesting forms of nidification of Australian birds, in which respect, he stated, this country maintained its reputation for singularity. He alluded to the mound-raising Leipoa, or mallee-scrub pheasant, an egg of which he exhibited; the Yellow-tailed Acanthiza, of whose singular double-roomed pendant nest a specimen was shown; and remarked on the burrowing habits of the Paradolotus, as well as the hanging structure of the Yellow-throated Sericornis, which he produced for inspection, he also recurred to the fact of the Australian representatives of the Cuckoo-family, though deprived of the familiar note, differing in no way from their European cousins in the habit of confiding their progeny to foster-parents. He further exhibited a valuable collection of Australian eggs, including that of the Lyre-bird (Menura superba) of which hitherto only a limited number of specimens have been

obtained; and pointed out that many further observations were still desirable for the completeness of information in this branch of natural history. He remarked, in conclusion—

One of the secondary causes of the often noticed scarcity of birds in Australia, as compared with England, is undoubtedly that so many species here lay a much less number of eggs. Amongst the commoner of Australian birds, the Honeyeaters (Mcliphagæ) average 2, and some species only one solitary egg; the Wattlebirds (Antocheræ) 2 or 3; the Sericornis tribe 3; the Fosterops 3; the Woodswallows (Artamis) 4, &c., and this opinion is corroborated by the fact that the few exceptional species whose individuals are really numerous, such as the common quail (Cotarnix pectorelis) and the Parokeet tribe are found to be large layers, the quail producing 11 to 14, and the parokeets 6 to 8 eggs. In England nearly all our commoner birds average 5, or at least 4 eggs, and there are many instances of a larger number. I said that this is a secondary cause, for Reason at once ascends higher in the scale, and asks why it should be so arranged that only a limited average is produced? Is it that this country would, in the case of most species, not offer sufficient food of a suitable kind to maintain a greater number of individuals, and therefore the all-balancing hand of Nature has struck the present adjustment as the true one between supply and consumption? Or, to change the line of inquiry, can we entertain the notion of a more recent origin of Australia, and thence deduct that the scarcity of animal life is in some degree owing to the fact that the same amount of time has not elapsed as in the older countries to enable this continent to be stocked up to its full capability? However this latter may be, it is certain that the rate of reproduction, as represented in the instance of most Australian birds, cannot be proceeding at a rate nearly equal to the annual increase in many other countries. In order to investigate fully this subject of the abundance or scarcity of animal life, it would however be necessary to take into account the different destroying causes in the countries under comparison, as well as the reproducing ones; and altogether the matter is one which deserves more than the few hasty glances here incidentally bestowed on it.